DOCUMENT RESUME

ED 452 212 TM 032 497

AUTHOR Shearer, C. Branton
TITLE Enhancing a Career Exploration Program for 8th Grade Students with an Assessment for the Multiple Intelligences.
PUB DATE 2001-04-12
NOTE 14p.; Paper presented at the Annual Meeting of the American Educational Research Association (Seattle, WA, April 10-14, 2001).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Career Exploration; Evaluation Methods; Intelligence Tests; *Middle School Students; Middle Schools; *Multiple Intelligences; Self Evaluation (Individuals)
IDENTIFIERS *Shadowing

ABSTRACT

The use of a multiple intelligences (MI) assessment to enhance a career exploration program for eighth graders was studied. All of the eighth graders (n=160) in a suburban middle school completed three sets of activities as part of their career exploration program. Students completed a multiple intelligences self-assessment, the Multiple Intelligences Developmental Assessment Scales (MIDAS) (C. Shearer, 1996), and were given interpretive information. They also completed an interest inventory and an 8-hour career shadowing experience. Only 105 students responded to the followup questionnaire at the end of the school year, and 85% of these reported that they had participated in the career shadowing experience. A large majority of students were able to recall the strengths identified on their MI profiles, and they agreed that the profiles described their strengths adequately. Data indicate that most students learned about their MI strengths and were able to use the information to make logical decisions about high school courses they would take and their career shadowing experiences. Data support the value of the Career Exploration Program for these students. An appendix contains a chart of the MI strengths and related career shadowing experiences. (SLD)

Reproductions supplied by EDRS are the best that can be made
from the original document.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

B. Shearer

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 452 212

Enhancing a Career Exploration Program

for 8th Grade Students

with an Assessment

for the Multiple Intelligences

C. Branton Shearer, Ph.D.

Presented at AERA Annual Conference
Seattle, WA. April 12, 2001

TM032497

M.I. Research and Consulting, Inc.
1316 S. Lincoln St.
Kent, Ohio 44240
330-673-8024
330-673-8810 FAX
sbranton@kent.edu

BEST COPY AVAILABLE

Proposal Brief Summary:

The goal of this consultation / paper session is to describe a recent study and receive feedback regarding this ongoing action research study involving the use of a multiple intelligences assessment to enhance a Career Exploration Program for 8th grade students.

This consultation / paper session will consist of three parts:

1- description of the multiple intelligences and a standardized MI assessment;

2- summary of the action research project and its results;

3- discussion of implications of these results and receive feedback for enhancing both the content of the career program as well as future efforts to determine its effectiveness.

Proposal Summary:

This presentation will describe the results of a recent study of 8th grade public school students who participated in a unique Career Exploration Program. All 8th grade students (N=160) in a suburban middle school completed three sets of activities as part of their Career Exploration process. These activities were implemented by their guidance counselor and this researcher as part of the regular school guidance curriculum in cooperation with the English teachers.

There were three main activities in the Career Exploration Program:

1- Students completed a multiple intelligences self-assessment and were provided with interpretative information (MIDAS).

2- Students completed an interest inventory (COPS).

3- Students participated in an 8 hour self-selected Career Shadowing Experience.

The goals of these activities are to enhance students' self-awareness and begin the process of career exploration via practical experience and to assist students with selecting a high school curriculum that will develop areas of intellectual strength.

To begin examining the effectiveness of this program it was first necessary to determine if students were able to remember, understand and make use of the multiple intelligences (MI) profile when selecting a Career Shadowing Experience (CSE).

Students were asked if their MI profile was used to select a CSE as well as a high school course elective. Students were also asked if their CSE was a valuable experience or not.

Instruments:

The Multiple Intelligences Developmental Assessment Scales (MIDAS) is a standardized self-report that provides a reasonable estimate of the student's intellectual disposition (Shearer, 1996). The MIDAS uses a process approach toward assessing the multiple intelligences where the student is guided through a structured verification process which produces a quantitative and qualitative profile of the 8 intelligences and 25 domain specific subscales. It was developed and standardized by the author of this proposal and has been positively reviewed by Mental Measurements Yearbook (Buros, 1999).

The COPS interest inventory is a standard assessment published in 1995 by EdITS. It covers 14 Career Clusters areas such as Science, Professional, Consumer Economics, Outdoor and Clerical.

Procedure:

Students completed the two assessments in January and February of the school year and then participated in a Shadowing Experience during the month of April. After completing the assessments students were provided with interpretative information and these materials were included in their Individual Career Plan folders.

After completing their CSE in June students responded to a brief questionnaire comprised of 5 questions:

1. What are your two MI strengths?
2. Is this a good description of your strengths?
3. Will you choose a high school course that will build on your strengths?
4. Did your MI profile suggest ideas for your Career Shadowing Experience?
5. Did you find your Career Shadowing a valuable experience? What did you do?

Results:

105 students responded to the follow-up questionnaire at the end of the school year. The 55 non-respondents were determined to be randomly scattered among all 8th grade classes. Of the 105 respondents only 85% (n=89) reported that they participated in a CSE. This non-graded program is conducted during students' English classes and is considered to be "voluntary" but participation is strongly encouraged.

The 105 students responded to the first two questions regarding their MI profiles in the following ways.

Overall, 88% (n=92) of students named either 1 or 2 of their MI strengths with 69% (n=72) naming 2 and 19% (n=20) identifying 1 strength. Of the 92 students who identified either 1 or 2 MI areas 91% (n=84) students agreed that this was a good description of their strengths.

Discussion:

A large majority of students are able to recall the strengths identified on their MI profiles suggesting that they have taken the process seriously and remembered the information several months after completion. Students reported they accept that their MI strengths were accurately described by their profiles.

Students responded in the following ways to the question *Will you choose a high school class that will build on your strengths?*

84% (n=88) of the total respondents indicated that their MI profiles suggested a high school course that would build on their strengths. Over half of this group named 1 or 2 courses that are well matched to their strengths. A few examples follow (see complete listing in appendix):

MI Strength	H.S. Course
> Naturalist	science, biology, zoology.
> Kinesthetic	welding, gym, woodshop, drama'
> Interpersonal	public speaking, philosophy, psychology, humanities.
> Math / Logic	computer, chemistry, Algebra, enriched geometry.
> Linguistic	Latin, writing, Spanish, Journalism, public speaking
> Music	Band, choir, chorus, media, performing arts.
> Spatial	art, hobby

Discussion

These data indicate that most students thought carefully about the implications of their MI profiles and were able to use the information to logically consider an appropriate high school course.

Students responded in the following ways to the question *Did your profile suggest ideas for your Career Shadowing Experience?*

55% of all students who participated in a CSE indicated that their MI profiles suggested a CSE. A review of the shadowing experiences chosen by students finds that a majority are logically related to students' MI strengths. A few examples of CSE matched to MI strengths follow (see complete listing in appendix)

MI Strength	CSE
> Naturalist	veterinarian
> Spatial	cosmetologist
> Linguistic	newspaper reporter
> Interpersonal	secretary
> Intrapersonal	computer programmer, school psychologists
> Kinesthetic	gym teacher, coach
> Math-logic	lawyer, astronomer

Discussion

It is evident from these data that a majority of students gain guidance from the MI profile in selecting a CSE and that they often choose an experience well-matched to their MI strengths.

Students responded in the following ways to the question *Did you find your Career Shadowing a valuable experience?*

Almost 80% of the students who participated in a CSE indicated that their CSE was a valuable experience. Students with a valuable CSE who identified 2 MI strengths indicated that the MI profile suggested a CSE (85%). A qualitative review of valuable CSEs found that they were almost always well matched with the students' MI strengths. For example, a student with a Kinesthetic strength shadowed a building contractor and visited houses that were in need of repair. He also identified high school courses in woodworking and welding. Another student high in Logical-mathematical and Linguistic selected a CSE at the local courthouse where she observed lawyers and indicated she would take advanced math classes.

Interestingly, students who had a valuable CSE matched their experience to their MI strength far more often (n=38) than did students who did not have a valuable experience (n=2). A significant discrepancy was found between students who were able to identify their 2 MI strengths (n=72) versus those students who only identified 1 area (n=20). Students who remembered 2 MI strengths were far more successful in matching their CSE to their strength (33 vs 5).

It is instructive to compare the mean MIDAS scores for the 8 main scales among the three different student groups: Valuable CSE (n=70) and Not Valuable (n=19) and Didn't Participate (n=16).

Student Groups

	Valuable (n=70)	Not Valuable(n=19)	Didn't Participate (n=16)
MI Scales	m%	m%	m%
Musical	54	48	29*
Kinesthetic	48	43	44
Math/Logic	50	46	53
Spatial	53	50	48
Linguistic	56	55	49
Interpersonal	59	54	53
Intrapersonal	54	51	46
Naturalist	50	48	44
Technical	52	47	45
Innovation	52	48	43

*p>.001

These results indicate that there are minimal differences between the Valuable (V) and Not Valuable (NV) groups. These differences are small ranging from merely 1 to 6 percentage points and none of them are statistically significant. However, it is interesting to note that the Not Valuable group's mean scores are lower on every MI scale.

The Didn't Participate (DP) group differs significantly from the Valuable group only on the Musical scale (p>.001). However, again we see a pattern of scores lower on most scales (except Kinesthetic and Math/logic which are higher) as compared to the Not Valuable group. Larger mean score differences are evident on the Linguistic, Intrapersonal, Technical and Innovation scales (DP lower by 7, 8, 7, 9 percentage points, respectively). These differences are not statistically significant. However, a closer examination of the subscales found statistically significant differences between the Valuable and DP groups in the following areas: Writing, Knowing Self, Relating Self to Others, Musical Ability, Vocal and Musical Appreciation.

Student Groups

	Valuable (n=70)	Not Valuable(n=19)	Didn't Participate (n=16)	
MI Subscales	m%	m%	m%	p
Writing	56	53	33	.006
Know Self	55	53	38	.09
Relate self to others	51	45	37	.06
Musical Ability	52	47	31	.006
Vocal	55	55	35	.01
Appreciation	58	48	26	.000

Discussion:

The meaning of low level discrepancies across all main scales between the Valuable, Not Valuable and DP groups is unclear. It may be merely a statistical artifact or a one time phenomena. There is insufficient data to begin to speculate regarding whether situational or other psychological variables may be related to this finding (e.g., low self-concept, poor judgment, impulsivity or immaturity). It will be interesting to see if this trend continues in a subsequent studies.

It is evident however that there are meaningful differences between students who have a valuable CSE experience and those who did not participate. Low scores on the Knowing Self and Relating Self to Others make sense in light of MI theory. However, there are no obvious explanations for why the DP students scored lower on the Writing and all Musical subscales. Further research is necessary to see if this trend continues and to look for other situational or psychological variables.

It has been suggested that these specific subscales may be lower for the DP group because they all involve active performance, personal discipline and are correlated with academic /school success. It has been observed that students who do not participate in the CSE often do not take the program seriously and tend to be less mature, less responsible and disengaged from school.

Summary and Recommendations:

These data indicate that most students learn about their MI strengths and are able to use this information to make logical decisions about high school courses and Career Shadowing Experiences. Students who know two of their MI strengths are better able to choose a CSE that will be valuable to them. Students who are less well developed in the self-knowledge, relating to others, writing and musical activities may be at a greater risk for non-participation in future CSE.

These data also provide strong statistical support for the conclusion that the Career Exploration Program is effective and of value to students. This program appears to increase many students' self-understanding and furthers their career exploration.

This study should be replicated in following years to see if the findings hold up over time and with a different sample of students. Additional follow-up surveys of these students in high school would also reveal if the effects are long lasting and enhance eventual career planning.

Suggestions for Increasing Program Effectiveness:

1- Provide students with an added MIDAS interpretative activity to ensure that they understand and can identify their 2 MI strengths.

2- Provide an activity and information that allows all students to make logical connections between their 2 MI strengths and a potential Career Shadowing Experience.

3- Identify students who score low on the Musical main scale (<30%) and the following subscales Writing (<35%), Know Self (<40%), Relate Self to Other (<40%). Provide these students with an extra counseling session to assist their selection of an CSE.

References

Shearer, C. B. (1996). The MIDAS: Professional Manual. MI Research and Consulting, Inc. Kent: Ohio.

EdITS (1995). COPSystem. ERAS/Educational Research and Services. San Diego, CA.

Buros (1999) "The MIDAS review" 14th Mental Measurements Yearbook.

Appendix

MI Strengths, High School Courses and Career Shadowing Experiences

The MI strengths are organized by each of the main scales. If the student identified 2 strengths these are listed in the order in which they were reported.

Kinesthetic

MI Strengths	HS Course	CSE
Kinesthetic	woods & welding	houses to be fixed.
Kinesthetic		x-ray technician
Kin – Music	P.E. and Band	2nd grade teacher
Kin – Inter	gym	gym teachers
Kin – Music	Media, Performing Arts Chorus, Instrument	
Music – Kin	Music	Fire department
Kin - Math	P.E.	Athletics coach / teacher
Intra – Kin		Beauty College

Intrapersonal

MIDAS Strengths	HS Course	CSE
Intrapersonal		computer program, business
Intra – Naturalist		first grade teacher
Intra – Math		judge
Math – Intra		dentist, surgery
Math – Intra		accounting clerk
Math – Intra		school psychologist
Intra – Inter		teacher
Inter – Intra		sales manager
Inter – Intra	dancing	teacher
Spatial – Intra		prof. baseball player
Spatial – Intra	media	teacher
Ling. – Intra		doctor

Interpersonal

MIDAS Strengths	HS Course	CSE
Interpersonal	gym, drama	secretary
Interpersonal		photographer
Inter – Musical		pre-school teacher
Music – Inter		kindergarten teacher
Music – Inter		fire dept. captain
Inter – Math	geometry	P.E. teacher
Math – Inter		lawyers
Music – Inter	Band, choir	store security
Ling. – Inter	Public speaking	Pre-school teacher
Ling. – Inter	philosophy, psych.	Band teacher
Spatial – Inter		teacher

Linguistic

MIDAS Strengths	HS Course	CSE
Linguistic	Humanities	newspaper reporter
Ling – Inter	Public speaking	Pre-school teacher
Ling – Inter		
Ling – Spatial		cosmetology
Ling – Spatial	art	kindergarten teacher
Ling – Intra		doctor
Ling – Inter	philosophy, psychology	band teacher
Ling – Music	choir, Latin	
Math – Ling	math class	Lawyers

Spatial

MIDAS Strengths	HS Course	CSE
Spatial – Intra		prof. Baseball player
Spatial – Intra	media	teacher
Spatial – Inter		teacher
Math – Spatial		scientific career
Math – Spatial	math. Algebra	astronomer
Naturalist – Spatial	art, crafts	cosmetologist, nail tech.
Ling – Spatial	art	kindergarten teacher
Ling – Spatial		cosmetology

Naturalist

MIDAS Strengths	HS Course	CSE
Naturalist	biology, zoology, vet	veterinarian
Nat – Spatial	art, crafts	cosmetology, nail tech
Math - Naturalist	Math, biology	veterinarian
Intra – Naturalist		first grade teacher

Math-Logic

MIDAS Strengths	HS Course	CSE
Math - Naturalist	Math, biology	veterinarian
Math – Spatial		scientific career
Math – Spatial	math. Algebra	astronomer
Math – Ling	math class	Lawyers
Math – Inter		lawyers
Inter – Math	geometry	P.E. teacher
Intra – Math		judge
Math – Intra		dentist, surgery
Math – Intra		accounting clerk
Math – Intra		school psychologist

Musical

MIDAS Strengths	HS Course	CSE
Music – Inter		kindergarten teacher
Music – Inter		fire dept. captain
Music – Inter	Band, choir	store security
Music – Kin	Music	Fire department
Kin – Music	P.E. and Band	2nd grade teacher
Kin – Music	Media, Performing Arts	
	Chorus, Instrument	
Inter – Musical		pre-school teacher
Ling – Music	choir, Latin	